

COPY OF PAPERS
ORIGINALLY FILED



Atty. Dkt. HML201 A1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: LOWENSTEIN, M
Serial No: 08/422,360
Filed: 04/17/95
Group Art Unit: 2836
Examiner: HUYNH, K
Title: ELECTRICAL FILTER/PROTECTOR, AND METHODS OF
CONSTRUCTING AND UTILIZING SAME

TC 2800 MAIL ROOM

#40
3/29/02
RECEIVED
MAR 25 2002

BRIEF ON APPEAL UNDER 37 CFR SECTION 1.192

Box AF
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 CFR Section 1.192 and in response to the final Office Action of 9/10/01 and the Advisory Action of 2/22/02, please enter the following Brief on Appeal for the above-identified patent application.

REAL PARTY IN INTEREST

The real party in interest is Harmonics Limited, LLC, who is the assignee of the inventor Michael Z. Lowenstein.

RELATED APPEALS AND INTERFERENCES

Appeal No. 1997-1187 filed 3/28/96 (Decision on Appeal, rendered 7/25/00) may have a bearing on the Board's decision in the present appeal.

STATUS OF CLAIMS

This patent application was filed 10/16/00 as a Continued Prosecution Application, accompanied by a Preliminary Amendment-A which cancelled all of the previous claims and substituted therefor new claims 22-41.

Claims 23-25, 27, 28, 30-32 and 40-41 were cancelled without prejudice, and without abandonment or dedication of the subject matter thereof, by Amendment-B filed 3/26/01.

Claim 36 was cancelled without prejudice, and without abandonment or dedication of the subject matter thereof, by Amendment-C filed 8/24/01.

The claims presently pending in the application are claims 22, 26, 29, 33-35, and 37-39.

Claims 33-35 and 37-38 are allowed.

Claims 22, 26, 29 and 39 are the subject of this appeal.

STATUS OF AMENDMENTS

In response to the Final Rejection of 9/10/01, applicant filed on 1/9/02 a Response Under 37 CFR 1.116 accompanied by a Declaration of John A. DeDad.

An Advisory Action having a mailing date of 2/22/02, states: "The reply filed fails to place this application in condition for allowance"; "The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection"; and "The issue regarding the elimination (sic) of the need to replace existing branch

circuit wiring or increase neutral conductors and redistributing existing load on an existing delta-wye transformer is a new issue”.

SUMMARY OF INVENTION

The present invention relates to a device for optimizing the operation of a nonlinear load, and particularly to a device which substantially eliminates neutral currents in an electrical power system.

FIGS.1-3 show completely-passive parallel resonant circuits 10 which are connected in series with nonlinear loads 8 in an electrical power system. Each circuit 10 is connected along a separate phase line of the power system, as shown in FIG. 3. Each circuit 10 comprises a parallel combination of reactor 1, capacitor 2, and resistor 3, tuned to the third harmonic of the AC power source frequency (page 4, lines 22-28).

In multiple phase electrical power systems, when the fundamental currents in all three phase lines are of equal magnitude, the neutral line carries no current. However, when harmonic currents are being drawn by nonlinear loads, certain harmonic currents do not cancel in the neutral line but instead are added therein. When tuned to the third harmonic, circuit 10 prevents the nonlinear load from drawing third harmonic currents, so the nonlinear load is forced to change the way in which it draws current in order to compensate for the suppression of third harmonic currents (page 6, lines 1-3 and 14-17). The resulting waveform of the current drawn by the nonlinear load, which more closely resembles the AC source frequency, does not effect the performance of the load (page 6, lines 23-26). When circuit 10 is tuned to the third harmonic of the source frequency, not only are the third harmonic currents reduced in the neutral line, but also neutral currents at other harmonic frequencies (page 7, lines 3-7).

One aspect of the invention includes a means for connecting the device to a nonlinear load. The connecting means may, for example, comprise a rack panel member having a perforated portion, (FIG. 7). In this way, the invention may replace a cooling panel so as to improve system performance without sacrificing airflow and/or additional equipment rack space (page 9, lines 13-18).

Another aspect of the invention comprises a mounting plate 41, a face plate 40 and connectors 42 (FIG. 11) for connection to the phase and neutral lines leading to the AC source (page 9, lines 19-23).

Another aspect of the invention includes a means, connected to circuit 10, for controlling current drawn by loads such as laser printers or copying machines, comprising high current limiting circuit 80, which is connected to circuit 10; current sensor 81, which detects high peak current levels drawn from load 82 and activates current limiter 80 upon a detection thereof (FIG. 13). When load 82 is not drawing high currents, sensor 81 switches current limiting circuit 80 from the system (page 10, lines 20-30; page 11, lines 1-14).

ISSUES

Applicant presents the following issues for review:

1. Are claims 22, 26, 29 and 39 properly rejected under 35 USC 103(a) as being unpatentable over applicant's specification page 3, lines 11-18, in view of Stacey et al. US Patent 3,849,677 and Thanawala US Patent 3,881,137?
2. Are claims 22, 26, 29 and 39 properly rejected on the ground of res judicata?
3. Does the Decision on Appeal in Appeal No. 1997-1187 rendered 7/25/00 address all the arguments presented by the Amendment-C filed 8/24/01?

4. Which of the Lowenstein, Kraus, and Pirrone Declarations is referred to in item 4(b) of the Final Rejection of 9/10/01?

5. Does “the totality of the rebuttal evidence of nonobviousness”, mentioned in item 4(b) in the Final Rejection of 9/10/01, include the Lowenstein Declaration, the Kraus Declaration, and the Pirrone Declaration?

6. Is it proper for the Examiner to not consider the Declaration of John A. DeDad filed 1/9/02 with the Response Under 37 CFR 1.116?

GROUPING OF CLAIMS

Rejected claims 22, 26 and 29 stand or fall together.

Rejected claim 39 should be separately considered because claim 39 requires “a housing member for said completely-passive power resonant circuit; and means for connecting the nonlinear load to said completely-passive power resonant circuit.”

ARGUMENT

The Declaration of John A. DeDad should have been considered by the Examiner, and the final rejection was premature, because of one or more of the following reasons:

1. Specification page 1, lines 11-18, is identified for the first time in the final rejection as applicant’s admitted prior art.
2. A rejection on the ground of res judicata is raised for the first time in the final rejection.
3. The final rejection contends for the first time that “the specifics of the three passive electrical components which are tuned to the third harmonic frequency are recited in the appealed claims 2 and 4 (affirmed by the board)”.

4. The final rejection states that “Applicant’s arguments filed 3/30/01 have been fully considered but they are not persuasive”, whereas the final rejection should have considered applicant’s arguments filed 8/24/01 and the three previously-filed Declarations of secondary considerations as probative evidence of non-obviousness.
5. The final rejection, for the first time, erroneously states that “The decision rendered 7/25/00 (pages 3-14) addresses all the arguments reiterated in the remarked (sic) filed 8/2/401(sic)”.
6. The final rejection, for the first time, quotes certain passages from the decision rendered 7/25/00 which deal with different claims and a different record.
7. Section 4b of the final rejection refers to an unidentified “declaration under 37 CFR 1.132”, but fails to identify if it refers to the Lowenstein Declaration, the Kraus Declaration, or the Pirrone Declaration.
8. The final rejection erroneously states that the facts presented in the unidentified declaration “are not germane to the rejection at issue”, but does not identify which declaration, which facts, and why such facts are not germane.
9. The final rejection erroneously states that “It (the unidentified declaration) includes statements... not relevant to the issue of nonobviousness of the claimed invention and provides no objective evidence thereof”, but fails to identify which declaration, and which statements.
10. The final rejection erroneously states that “there is no showing that persons skilled in the art ...knew of the teachings of the above cited references...”, which flies in the face of the well-established patent doctrine that the artisan is presumed to know the teachings of the prior art.
11. The final rejection contends that the unidentified “declaration fails to prove that the commercial success is due to the merits of the claimed invention and not the marketing of

the product itself”, whereas in contrast all of the Lowenstein, Kraus, and Pirrone Declarations and the DeDad Declaration do prove that.

12. The final rejection, for the first time, contends that “The artisan would have found the Stacey reference to be of particular pertinence to the problem at hand....”
13. The final rejection, for the first time, contends that “the reference explicitly discloses that an active element is unnecessary when there is but one harmonic frequency”.
14. The final rejection, for the first time, contends that “harmonic filtering traditionally consisted of passive components, the artisan - - when faced with the problem of attenuating a single harmonic frequency - - would have found Stacey to be suggestive of using only passive components.”
15. The final rejection, for the first time, contends that “the artisan would have recognized...three identical filters having three passive elements in the configuration of Figure 5 of Stacey - - one filter for each phase of a three phase system.”
16. The final rejection, for the first time, contends that “Claims 22, 26, 29, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant’s admitted prior art (page 1, lines 11-18) in view of Stacey and Thanawala”.
17. The DeDad Declaration is directed to issues which were newly raised by the Examiner in the final rejection..

In the Office Action of 4/30/01, the Examiner asserted that “applicant’s admitted prior art” was the entire patent application of applicant, namely page 1, lines 1 et seq. In contrast, the final rejection, for the first time, asserts that applicant’s admitted prior art is only page 1, lines 11-18.

Specification page 1, lines 11-18, state:

“In electrical power systems, harmonic currents are often created due to the presence of nonlinear loads located therein. In some instances, significant levels of third order harmonic currents

are created in electrical power systems having single phase nonlinear loads, which may often approach the level of the fundamental frequency current. Such third order harmonic currents adversely effect (sic) the performance of power systems by causing the peak voltage of the power lines to flatten, thus disrupting the operation of nonlinear loads, such as single-phase switching power supplies and corresponding devices connected thereto.”

The Examiner concedes that Stacey and Thanawala, standing alone, would not make applicant’s claims unpatentable.

In addition, there is no motivation to combine Stacey and Thanawala. Indeed, even if there was some motivation to combine Stacey and Thanawala, such combination, standing alone, would not result in the invention as specified in the rejected claims.

Moreover, such combination of Stacey and Thanawala teaches away from the claimed invention, as explained more fully below.

Notwithstanding the foregoing, the Office Action of 4/30/01 states that “the examiner provided the motivations for combining the references...”

Because the final rejection fails to assert any motivation for combining the references, a prime facie case of obviousness has not been made.

The burden of establishing obviousness rests upon the Examiner espousing such. *Stratoflex Inc. v Aeroquip Corp.*, 713 F. 2d at 1534, 218 USPQ at 875 (Fed. Cir. 1983).

In addition, where the Examiner asserting obviousness must rely upon a combination of prior art references to establish obviousness, the Examiner bears the burden of showing some teaching or suggestion in these references which support their use in combination. *W.L. Gore & Assocs., Inc v. Garlock, Inc.*, 721 F. 2d at 1552, 220 USPQ at 312. It is legal error to place this burden on the applicant.

The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some “teaching, suggestion or reason” to combine cited references. *Gambro Lundia AB v. Baxter Healthcare Corp*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997).

The opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. *In re Dembiczak*, 175 F. 3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); *In re Gartside*, 203 F.3d 1305, 53 USPQ 2d 1769 (2000) (guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher).

Whether a motivation to combine prior art references has been demonstrated is a question of fact. *Winner International Royalty Corp. v. Wang*, 202 F.3d 1340, 1348, 53 USPQ2d 1580, 1586 (Fed. Cir. 2000).

It is impermissible for the Examiner to first ascertain factually what applicant did, and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and then utilized to reconstruct applicant’s invention from such prior art. *In re Shuman*, 361 F.2d 1008, 1012, 150 USPQ 54, 57 (CCPA 1966).

The test to be applied is whether the claimed invention would have been obvious to one skilled in the art when the invention was made, not to an Examiner after learning all about the invention. *Stratoflex, Inc. v. Arequip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983).

Inventions must be held to be nonobvious where neither any reference, considered in its entirety, nor the prior art as a whole, suggested the combination claimed. *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985); *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 932-33 (Fed. Cir. 1984).

Nowhere does the final rejection indicate where in the prior art there might be a suggestion of combining teachings of the individual references, or how, if there was such a suggestion, such combination would equal any invention claimed by applicant.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438.

The final rejection is also in error: in considering the claims in less than their entirety; in considering the references in less than their entirety; and in disregarding disclosures in the references that diverge from and teach away from the invention at hand. W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F. 2d at 1550, 1552, 221 USPQ at 311.

The 1974 Stacey reference teaches away from the applicant's invention.

Applicant's rejected claims require, amongst other things, a completely-passive parallel resonant circuit having three passive electrical branches connected in parallel, and one or more non-linear loads. In contrast, the 1974 Stacey reference and the 1975 Thanawala reference, taken singly or in combination, teach away from applicant's claimed invention.

In particular, Stacey states at column 1, lines 13-26, that: "In the past, most filters of this type employed only passive components (e.g., inductors and capacitors).... Unfortunately, however, in high power, low frequency applications, the value, size and rating of the shunt capacitor as well as the extra KVAR demand on the alternating current source becomes excessively high to warrant any practical use of this arrangement."

Furthermore, Stacey also states at column 2, lines 16-19, that: "In accordance with the present invention, the hybrid filter arrangement for high power application is provided which employs both active and passive elements while at the same time overcoming the main disadvantages of each when used separately."

Thus, it is clear that Stacey teaches away from using only passive elements.

Moreover, the final rejection, for the first time, asserts at page 3 that “the reference explicitly discloses that an active element is unnecessary when there is but one harmonic frequency.” This assertion is false. Nowhere does Stacey explicitly disclose that an active element is unnecessary when there is but one harmonic frequency.

In contrast, Stacey states, at column 7, lines 5-10: “Of course, if the elements 60 and 62 are exactly tuned to the ripple frequency, and assuming that only one ripple frequency exists, then if the internal resistance of the passive elements is zero, the active element 28' will not come into play as is the case with the circuits previously described.” (Emphasis added).

This statement by Stacey is not a disclosure that an active element is not necessary when there is but one harmonic frequency.

In addition, the artisan would know that this statement by Stacey assumes things which are not scientifically correct, and do not reflect the real world. First, the assumption that only one ripple frequency exists is false because more than one ripple frequency always exists.

Secondly, the assumption that the internal resistance of the passive elements is zero is also scientifically incorrect, because the internal resistance of the passive elements is never zero.

Furthermore, even if the Stacey assumptions were correct, which they are not, the assertion by Stacey that the active element 28' will not come into play is not a teaching or suggestion to remove the active element 28' and substitute therefor a passive resistor.

Also, Stacey discloses a linear load (Stacey column 3, line 37), and not one or more non-linear loads as required by applicant's rejected claims.

The final rejection is completely silent as to what Thanawala allegedly contributes to the nonobviousness rejection.

The final rejection asserts, for the first time, the ground of res judicata. Applicant respectfully traverse the res judicata rejection for the reasons set forth below.

The final rejection fails to make any showing of an identity of the issues presented for adjudication and the issues previously decided. Res judicata requires a showing of an identity of the issues presented for adjudication and issues previously decided. In re Hellbaum, 54 CCPA 1051, 371 F.2d 1022, 152 USPQ 572 (1967); In re Fried, 50 CCPA 954, 312 F.2d 930, 136 USPQ 429 (1963). Here there is no such identity of such issues, and in addition, the final rejection fails to make any showing or even assert any alleged identity of such issues.

The claims considered by the Board in Appeal No. 1997-1187 are not identical to the claims rejected by the present final rejection.

Furthermore, there is no identity between the record previously before the Board and the record herein.

There is also no identity between the evidence as a whole previously before the Board, and the evidence as a whole herein, including the evidence of secondary considerations going to the issue of obviousness/nonobviousness. Such evidence of secondary considerations going to the issue of obviousness/nonobviousness must be considered prior to reaching a conclusion of obviousness/nonobviousness, and such evidence was not previously before the Board. In re Herr, 377 F.2d 610, 153 USPQ 548 (CCPA 1967); In re Russell, 169 USPQ 426 (CCPA 1971); Fromson, 755 F. 2d at 1556-57, 225 USPQ 32; W.L. Gore, 721 F.2d at 1555, 220 USPQ 314.

In addition, even if the final rejection made a showing of identity of the issues presented for adjudication and the issues previously decided which are required by a rejection of res judicata (which the final rejection does not), the rejection on the ground of res judicata had been waived by the Examiner. If res judicata was applicable, the Examiner should have made such rejection in the first Office Action, and indeed should have made such first Office Action on the ground of res

judicata as a final rejection, which the Examiner did not. Thus, for this reason alone, the belated rejection on the ground of res judicata has been waived. In re Kaghan, 387 F.2d 398, 156 USPQ 130 (CCPA 1967).

The final rejection at item 4a(iv) states an incomplete quotation from the decision rendered 7/25/00. The complete quotation of the decision of 7/25/00 (page 8, lines 1-5) states: “We find upon consideration of the evidence as a whole that the artisan would have recognized, as a suggested solution to the stated problems, three identical filters having three passive elements in the configuration of Figure 5 of Stacey - - one filter for each phase of a three phase system.” Emphasis has been added to underscore the portion omitted in the final rejection.

Again, it is important to note that the evidence as a whole previously before the Board was not the evidence as a whole for the final rejection herein. The present evidence as a whole includes several Declarations of secondary considerations.

Item 4b of the final rejection refers to “the declaration” without identifying to which of the three previously-filed Declarations the Examiner refers. Thus, applicant does not know, and the Board does not know, to which declaration the final rejection refers.

The final rejection states at page 3 that the unidentified declaration presents facts which “are not germane to the rejection at issue”, but fails to identify such facts, and why such unidentified facts are not germane to the rejection at issue. In contrast, it is important to note that all of the Declarations specifically recite or identify the claims at issue, and present facts proving the nonobviousness of the invention as claimed.

Item 4b(ii) of the final rejection alleges that the unidentified declaration “includes statements which amount to an affirmation that the claimed subject matter functions as it was intended to function”. However, the final rejection does not identify which declaration, nor to which statements the final rejection refers.

Item 4b(iii) of the final rejection contends that the unidentified declaration states: “that the claimed subject matter solved a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and, if so, for how long. In addition, there is no showing that persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references and still were unable to solve the problem.”

First, the law presumes that artisans knows of the teachings of the cited references.

“The issue of obviousness is determined entirely with reference to a hypothetical ‘person having ordinary skill in the art.’ It is only that hypothetical person who is presumed to be aware of all of the pertinent prior art.” *The Standard Oil Company v. American Cyanamid Company*, 227 USPQ 293, 297 (CAFC 1985). (Emphasis added).

Secondly, the three previously-filed Declarations deal with all of the matters mentioned in item 4b(iii) of the final rejection.

However, if the Examiner believed that the unidentified Declaration did not address the newly raised item 4b(iii) issues, then that is precisely why the Examiner should have considered the DeDad Declaration together with the material attached thereto which more specifically deals with the items complained of in item 4b(iii) of the final rejection.

Finally, there is no authority for the proposition that all of the items mentioned in item 4b(iii) of the final rejection be set out within the four corners of a single declaration, nor that all of such secondary considerations be stated within the four corners of a single declaration setting forth evidence of secondary considerations.

Item 4b(iv) of the final rejection alleges that the unidentified “declaration fails to prove that the commercial success is due to the merits of the claimed invention and not the marketing of the

product itself". Again, applicant does not know, and the Board does not know, which declaration is referred to.

Notwithstanding the foregoing, and in contrast, the Lowenstein Declaration specifically states:

"11. The commercial success or sales success of the Harmonics Limited products embodying the INVENTION is not due to price concessions. The products are sold at a higher initial cost than products incorporating competing technology.

"12. The commercial success or sales success of the Harmonics Limited products embodying the INVENTION is not due to purchases by representatives and distributors. Harmonics Limited products embodying the INVENTION are sold directly to customers, not through distributors or representatives.

"13. The commercial success or sales of Harmonics Limited products embodying the INVENTION is not due to a large advertising campaign. The first national advertising campaign for the INVENTION was launched in June, 2000. Before that date, advertising was by word of mouth and direct customer contact by sales representatives. The national advertising expenditure in the year 2000 relating to Harmonics Limited products embodying the INVENTION was \$60,000.

"14. Based on my many years of experience in the industry, the sales of Harmonics Limited products embodying the INVENTION far exceed that which would normally be expected in the relevant marketplace for a new product. For example, in 1996 a major company introduced a competing product that used different technology. The competing product cost over \$24 million to develop and was heavily advertised. In two years, sales consisted of less than \$50,000. The competing product was withdrawn from the marketplace."

“11. The commercial success of equipment from Harmonics Limited utilizing the INVENTION is attributable to the unique way it operates, the prevention of harmonic current flow rather than removal of harmonic currents after they are formed in the system.”

The Advisory Action of 2/22/02 says the DeDad Declaration will not be considered because it is not directly solely to issues which were newly raised by the Examiner in the final rejection. In contrast, item 4 of the final rejection raises new issues to which the DeDad Declaration is directed.

For example, the DeDad Declaration (not considered by the Examiner) specifically states:

“5. Harmonics Limited has advertised only twice in EC&M Magazine, in the September and October 2000 issues. Prior and subsequent to these issues, Harmonics Limited has had no major advertising in any Primedia magazine.

“6. The commercial success of the INVENTION is based on the advantage of its technology, which eliminates the need to replace existing branch circuit wiring or increase neutral conductors, and redistribute existing loads on existing delta-wye transformers. The initial cost of the above coping methods is saved through the application of the INVENTION. Other technologies involve the use of tuned filters in harmonics mitigating systems that are application unique, depending on the harmonics present and their magnitude.”

Another example are the articles (attached to the DeDad Declaration) which are directed to and rebut the new issues raised by item 4b(iii) of the final rejection.

The objections to the unidentified declaration raised in item 4b of the final rejection amount to mere argument and conjecture which are insufficient. Where the marketed product embodies the claimed features and is coextensive with them, then a nexus is presumed, and the burden shifts to the Examiner asserting obviousness to present evidence to rebut the presumed nexus. J.T. Eaton & Co. v. Atlantic Paste & Glue Co., 106 F.3d 1563, 1571, 41 USPQ2d, 1641, 1647; Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392- 93, 7 USPQ2d 1222, 1226. The final rejection

presents no evidence to rebut the presumed nexus.

The presumed nexus cannot be rebutted with mere argument; evidence must be put forward. Demaco. 851 F.2d at 1393, 7 USPQ2d at 1226-27 ("It is thus the task of the challenger to adduce evidence.... Argument and conjecture are insufficient."). In the present case, the nexus that the commercial success of the invention is due to the merits of the claimed invention is clear from the presumption and the several Declarations as filed.

In addition to the secondary consideration of commercial success, industry acceptance is also evidence of nonobviousness. Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679, 7 USPQ2d 1315, 1319 (Fed. Cir. 1988). The Lowenstein, Kraus, and Pirrone declarations, as well as the DeDad Declaration (not considered by the Examiner), show clear evidence of industry acceptance of the invention.

CONCLUSION

For the foregoing reasons, appellant submits that the rejection of claims 22, 26, 29 and 39 is in error and should be reversed.

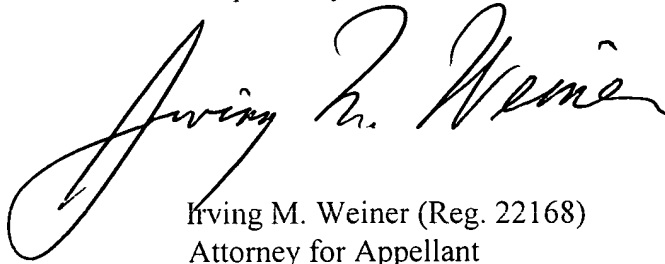
This Appeal Brief is accompanied by an Appendix which presents a clean copy of the claims involved in the appeal.

Appellant encloses herewith a PTO-2038 form to cover the fee for the Appeal Brief.

Appellant encloses herewith three copies of this Brief on Appeal and its Appendix.

Favorable consideration and reversal of the Final Rejection are earnestly requested.

Respectfully submitted,

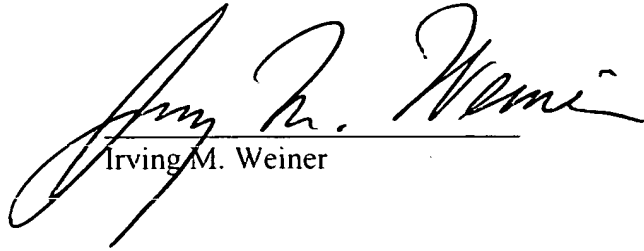
A handwritten signature in black ink, appearing to read "Irving M. Weiner", is written over a horizontal line.

Irving M. Weiner (Reg. 22168)
Attorney for Appellant
989 724-7400

Date: March 8, 2002
Weiner & Burt, P.C.
635 N. US-23
POB 186
Harrisville, MI 48740

Certificate of Mailing

I hereby certify that three copies of the foregoing Brief on Appeal and its Appendix with its mentioned attachments were sent to Box AF, Assistant Commissioner for Patents, Washington, D.C. 20231, on March 8, 2002 by first class mail.



Irving M. Weiner

APPENDIX

22. In a multiple phase electrical system for supplying power from an AC source to one or more nonlinear loads connected to at least one phase line therein, a device for substantially eliminating currents in a neutral wire, said device comprising:

a first completely-passive parallel resonant circuit having three passive electrical branches connected in parallel;

said first completely-passive parallel resonant circuit is tuned to a third harmonic frequency or a fundamental frequency of said AC source; and

said three passive electrical branches comprise a first branch consisting of a capacitor, a second branch consisting of a reactor, and a third branch consisting of a resistor.

26. A device according to claim 22 wherein:

each phase line of said multiple phase electrical system supplies power to an associated one of said nonlinear loads;

said device includes a second completely-passive parallel resonant circuit and a third completely-passive parallel resonant circuit;

each of said first, second and third completely-passive parallel resonant circuits is connected along a separate phase line of said multiple phase electrical system in series with at least one of said nonlinear loads whose power is supplied by said separate phase line; and

each of said first, second and third completely-passive parallel resonant circuits is tuned to said predetermined harmonic frequency of said fundamental frequency of said AC source.

29. A device for substantially eliminating a predetermined harmonic current generated by a nonlinear load in an electrical distribution system which distributes power from an AC source, said device comprising:

a completely-passive parallel resonant circuit connected in series with said nonlinear load;

said completely -passive parallel resonant circuit comprises three completely-passive electrical branches;

said completely-passive parallel resonant circuit is tuned to a third harmonic frequency of a fundamental frequency of said AC source to change the current drawn by said nonlinear load; and

said three completely-passive electrical branches comprise a first branch consisting of a capacitor, a second branch consisting of a reactor, and a third branch consisting of a resistor.

39. A device for reducing currents in an electrical system which supplies power to a nonlinear load from an AC source, comprising:

a completely-passive parallel resonant circuit connected in series with said nonlinear load;

said completely-passive parallel resonant circuit comprises three completely-passive electrical branches;

said completely-passive parallel resonant circuit is tuned to a third harmonic frequency of said AC source to change the current drawn by said nonlinear load;

a housing member for said completely-passive parallel resonant circuit; and

means for connecting the nonlinear load to said completely-passive parallel resonant circuit.